

**MICHIGAN BRFS SURVEILLANCE BRIEF***A NEWSLETTER FROM THE CHRONIC DISEASE EPIDEMIOLOGY SECTION, MDCH***Highlights from the 2006 Michigan BRFSS**

The 2006 Michigan Behavioral Risk Factor Survey (BRFS) was conducted by the Institute for Public Policy and Social Research at Michigan State University for MDCH, included 5,662 completed interviews, and had a response rate of 52.4%.

The table to the right includes preliminary prevalence estimates for selected risk factors and health conditions. An estimated 15.2% of Michigan adults were in fair to poor health in 2006, and 23.9% had a disability (reported that they were limited in any activities or used special equipment due to a health problem). Nearly 15% of adults aged 18-64 years were estimated to be without health insurance in 2006.

Some topics are included annually in the Behavioral Risk Factor Surveillance System (BRFSS) and others biennially. Cancer screening topics are usually part of the core questionnaire in even-numbered years and, therefore, were included in 2006. Among women aged ≥ 40 years, 57.2% reported having had both a mammogram and a clinical breast exam within the previous year. The majority of men aged ≥ 50 years (60.4% [57.1-63.6]) reported having had the PSA test for prostate cancer in the previous year. More than half of all adults aged 50 years or older (55.9% [54.0-57.9]) were estimated to have had a sigmoidoscopy or colonoscopy within the previous 5 years, while only 27.5% (25.7-29.3) had had a blood stool test within the previous 2 years.

A question on gum disease was included for the first time in 2006 to address state-specific data needs. Nearly 9% reported that they had been told by a doctor, dentist, or dental hygienist that they have gum disease.

Preliminary Estimates from the 2006 Michigan BRFSS		
	%	95% CI
General health fair or poor	15.2	14.2-16.4
Has disability	23.9	22.6-25.2
No health insurance (18-64 yrs)	14.6	13.1-16.1
Obesity	28.7	27.3-30.2
Current smoking	22.1	20.7-23.5
Binge drinking	17.5	16.2-18.9
Current asthma	9.5	8.6-10.5
Diabetes	9.0	8.2-9.8
Had mammogram & CBE in past yr. (women 40+)	57.2	55.1-59.3
Gum disease	8.7	7.8-9.6

Trends in the Prevalence of Obesity

The prevalence of obesity among U.S. adults doubled between 1976-1980 and 2003-2004.^{1,2} Obesity has become a serious public health concern since obese adults are at increased risk for premature mortality³ and for developing chronic conditions such as diabetes, gallstones, hypertension, heart disease, and stroke.⁴

Body mass index (BMI) was calculated using self-reported weight and height from the 2006 MI BRFSS, and overweight and obesity were defined as a BMI of 25.0-29.9 and ≥ 30.0 , respectively. In 2006, the majority of Michigan adults were estimated to be either overweight (36.1%) or obese (28.7%).

MI BRFSS News

- This is the inaugural issue of our new publication, *Michigan BRFSS Surveillance Brief*. This quarterly electronic publication will be prepared by the Michigan BRFSS staff and represents an additional method by which we will distribute results from the Michigan BRFSS.
- Future issues of the *Michigan BRFSS Surveillance Brief* will each focus on a particular topic. Upcoming issues in 2007 will be devoted to diabetes prevalence and management, and fast food consumption.
- Standard tables with preliminary estimates from the 2006 Michigan BRFSS are now available on our website at: <http://www.michigan.gov/brfs>.

Trends in Obesity (continued)

The proportion of Michigan adults who are obese appears to be increasing again. After several years of holding at approximately 25% (2001-2004), the prevalence of obesity has significantly increased from 25.5% (24.0-26.9) in 2004 to 28.7% in 2006 (Figure 1). The prevalence of overweight has remained fairly consistent over this time period.

Obesity is more prevalent in Michigan than in most other states. The annual Michigan prevalence has been consistently higher than the median of states and territories participating in the BRFSS (Figure 2). With the exception of just one year (1996), the lower limit of Michigan's 95% confidence interval was above the median.

Although obesity has been increasing in almost all demographic subgroups in Michigan, there are clear and consistent patterns by demographics. The prevalence of obesity tends to increase with age (in 2006 from 15.5% of 18-24-year-olds to 35.1% of those aged 55-64) and then to decrease. Obesity is less prevalent among those with a college degree compared with those with a high school diploma or some college (in 2006 23.8% vs. 32.4% and 29.4%, respectively).

There is notable disparity in the prevalence of obesity by the four major sex-race groups in Michigan (Figure 3). Black women have consistently had the highest prevalence, generally followed by black males, white males, and white females. The absolute increase in prevalence since 1990 has also been higher among blacks compared with whites; black men showed an increase of approximately 26 percentage points and black women 21, while white men increased by 14 percentage points and white women by 12. Across time, the prevalence of obesity has for the most part been similar among white men and women, however, in 2006 the prevalence among white men was significantly higher than among white women (29.2% vs. 24.4%, $p < .01$).

References

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- ²Ogden CL, et al. Prevalence of overweight and obesity in the United States, 1999-2004. *JAMA* 2006;295:1549-55.
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- ⁴Field AE, et al. Impact of overweight on the risk of developing common chronic diseases during a 10-year period. *Arch Intern Med*. 2001;161:1581-86.

Figure 1. Prevalence of Overweight and Obesity Among Michigan Adults, 1990-2006

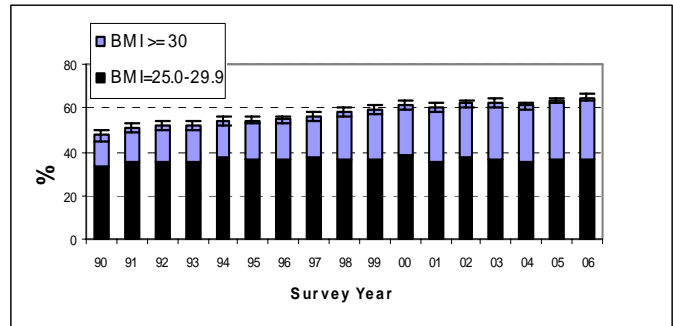


Figure 2. Prevalence of Obesity, Michigan Compared with US Median, 1990-2006

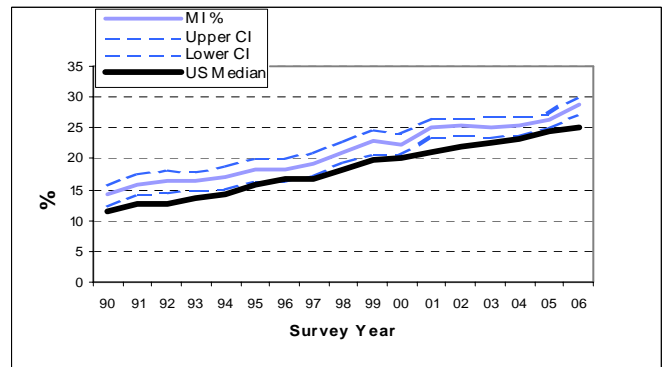
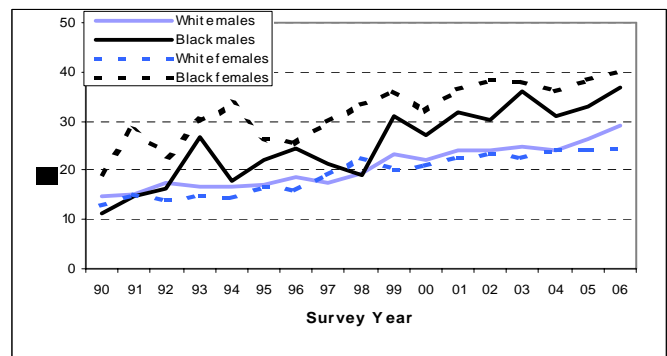


Figure 3. Prevalence of Obesity by Sex-Race Groups, 1990-2006



The Michigan Behavioral Risk Factor Surveillance System (BRFSS)

The Michigan BRFSS comprises annual, statewide telephone surveys of Michigan adults aged 18 years and older and is part of the national BRFSS coordinated by the CDC. The annual Michigan Behavioral Risk Factor Surveys (BRFS) follow the CDC BRFSS protocol and use the standardized English core questionnaire that focuses on various behaviors, medical conditions, and preventive health care practices related to the leading causes of mortality, morbidity, and injury. Interviews are conducted across each calendar year. Data are weighted to adjust for the probabilities of selection and a poststratification weighting factor that adjusts for the sex, age, and race distribution of the adult Michigan population. All analyses are performed using SUDAAN to account for the complex sampling design.

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